

Critical Care Therapy and Respiratory Care Section

Category: Clinical

Section: Clinical Monitoring

Title: Monitoring of Patients Undergoing Conscious Sedation

Policy #: 09 Revised: 05/00

1.0 DESCRIPTION

1.1 Definition: The following procedure describes the role of the critical care therapist in the monitoring of patients receiving conscious sedation. Conscious sedation may be required to control anxiety or to avoid excessive movement during invasive procedures, particularly in young children. Sedated patients require close monitoring of their cardiopulmonary status due to the potential for partial or complete loss of protective reflexes, including the ability to maintain a patent airway. A multidisciplinary approach to admission, monitoring, and discharge criteria of these patients is essential.

1.2 Indications

- 1.2.1 Bone marrow aspiration
- 1.2.2 Bone marrow biopsy
- 1.2.3 Bone biopsy
- 1.2.4 Bronchoscopy
- 1.2.5 Central venous catheterization
- 1.2.6 Lumbar puncture
- 1.2.7 Any procedure in which the use of sedation/analgesia in a nonintubated patient is performed
- 1.3 Contraindication: Hypersensitivity to the medications of sedation/analgesia
- 1.4 Complications
 - 1.4.1 Hypotension

- 1.4.2 Hypoventilation
- 1.4.3 Apnea
- 1.4.4 Oxyhemoglobin desaturation
- 1.4.5 Bradycardia
- 1.4.6 Other agent-specific complications exist. Refer to the medication's package insert or the Physician's Desk Reference for more information.

1.5 Precautions

- 1.5.1 The risk of complications increases as drug dosages are increased and as drugs are used in combination.
- 1.5.2 Hemodynamic compromise may potentiate the effects of conscious sedation and increase the risk of complications.
- 1.5.3 Preexisting medical conditions (i.e., dehydration, infection, congestive heart failure, valvular heart disease, central nervous system disease, renal failure, hepatic failure, etc.) may affect the response to conscious sedation and increase the risk of complications.
- 1.5.4 The function of all monitors, emergency equipment, and supplies should be ascertained prior to the administration of sedation.
- 1.6 Adverse Reactions and Interventions: If apnea, hypoventilation, desaturation, and/or cardiac instability occur during a procedure, notify the physician and proceed with appropriate interventions, including: oxygen administration, manual resuscitation via bag and mask, intubation assistance, code assistance, and other interventions as directed by the physician.

2.0 EQUIPMENT

- 2.1 Appropriate bedside intubation box for adult or pediatrics
- 2.2 Manual resuscitator with appropriate size mask
- 2.3 Suction supplies
- 2.4 Cardiorespiratory monitor with EKG cable and electrodes
- 2.5 Appropriate size blood pressure cuff with module

- 2.6 Pulse oximeter and probe or application device for adult or pediatrics
- 2.7 Supplemental oxygen via oxygen extension tubing or as per order by the physician

3.0 PROCEDURE

- 3.1 Check the physician's orders.
- 3.2 Assemble and check the function of all equipment and supplies.
- 3.3 Ensure patient monitoring devices are properly placed and adequate signals or waveforms are displayed.
- 3.4 Ensure that all alarms are set appropriately per patient age and history.
- 3.5 Monitor the patient's airway and vital signs throughout the procedure. When priority care dictates that the therapist cannot remain at the bedside, nursing performs this function in conjunction with the physician. A critical care therapist must be immediately available at all times, however, in case of adverse events.
- 3.6 Apply supplemental oxygen when indicated.

4.0 POST PROCEDURE

- 4.1 Monitoring should be continued at least until: (1) no further sedation will be given, and (2) pulse oxygen saturation is greater the 94 % (or at baseline level).
- 4.2 Dispose of and clean equipment according to CCTRCS policies.
- **5.0 CHARTING:** Documenting the initiation of or changes to oxygen therapy on the "Comments" side of the Continuous Ventilation Record and on the nursing flowsheet. Documentation should include a full assessment of the patient according to CCTRCS policy.

6.0 REFERENCES

- 6.1 Clinical Center Policy on "Conscious Sedation", M-92-9.
- 6.2 CCMD Policy "Administration of Sedation/Analgesia in Non-Intubated Patients"

- 6.3 CCMD Policy "The Use of Sedative/Hypnotics and Anaglesica in Non-Intubated Pediatric Patients during Procedures"
- 6.4 Barnhart SL, Czervinske MR, eds. Perinatal and pediatric respitatory care. Philadelphia: WB Saunders Co., 1995.

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(Orig. 9/96)		
(Rev. 5/00)		